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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,546	01/21/2004	Shuuji Yano	042043	8625

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EXAMINER

VU, PHU

ART UNIT	PAPER NUMBER
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2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/760,546	YANO ET AL.	
	Examiner	Art Unit	
	Phu Vu	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 18, 19, 22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 20, 21 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-17, 20-21 and 24-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-17, 20-21 and 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Mazaki US 5491001 and further in view of Kawabata JP 2001-093827.

Regarding claims 1, 5, 20 and 24, Mazaki teaches an optical film comprising: an optical compensation layer showing refractive index anisotropy satisfying a relationship $n_x^2 = n_y^2 > n_z^2$ (see column 31 lines 15-20) n_0 corresponds to the index of refraction in the z direction and N references the index of refraction in the X and Y directions Mazaki also teaches this laminated on a base material film with an isotropic property (see column 26 lines 30-32). Therefore the absolute differences between indices of refraction in (X and Y), (X and Z) and (Y and Z) will be zero which is less than .0003. The references fails to teach a base material film comprises a thermoplastic resin with a substituted or nonsubstituted image group on a side chain (A) and a

thermoplastic resin with a substituted or nonsubstituted phenyl group and a nitrile group on a side chain (B) however Kawabata discloses a thermoplastic resin with a substituted or nonsubstituted image group on a side chain (A) and a thermoplastic resin with a substituted or nonsubstituted phenyl group and a nitrile group on a side chain (B) that has benefits of extremely small phase difference between film surface direction and thickness direction (isotropic) and having a moisture vapor permeation rate suited for a protective film (see abstract). Therefore, it would have been obvious to use a thermoplastic resin according to Kawabata as it is suited for protection due to a low moisture vapor permeation rate and has an extremely small phase difference in between surface direction and thickness direction.

Regarding claims 3 –4 and 7-8, the reference teaches the optical compensation layer made of cholesteric liquid crystal, an organic material (see column 3 lines 53-67).

Regarding claim 9 – 10 and 15, the reference shows a polarizer laminated on either side of a compensator (see fig. 4a- 4e elements 1 and 4) therefore at least one must be formed / coated on the base side.

Regarding claim 11, the reference teaches the compensator for liquid crystal display (see title and abstract).

Regarding claims 12 – 14 and 16, the reference teaches the optical compensation layer is coated on and formed directly on the base material film side (see column 26 lines 25-35).

Regarding claims 17 and 21, the reference teaches polymethyl methacrylate as the base material film, which is an acrylic based resin (column 26 line 33).

Regarding claims 25-26, although the reference teaches the compensator/polarized combination used disposed in a TN mode LCD however a VA mode LCD shares all the elements of a TN mode LCD including polarizer and compensator. Furthermore Mazaki discloses the compensator/polarizer combination has little intra-plane refractive anisotropy and can be used to reduce viewing angle dependency of the display therefore and also combined with pretilt (see column 29 lines 5-20) therefore, it would have been obvious to use the polarizer according to Mazaki in a VA mode display to gain these benefits.

Claims 2 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Mazaki in view of Kawabata.

Regarding claims 2 and 6, Mazaki teaches all the limitations of claims 2 and 6 except a film thickness of 10 micrometers or less. The reference teaches film thicknesses of .4 to 40 microns (see column 28 lines 23-25). However, the MPEP 2144.05 states "in the case where claimed ranges 'overlap or lie' inside ranges disclosed by the prior art' a prima facie case of obviousness exists." Therefore the claimed ranges are obvious over that of the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871

Andrius Skelton
ANDRIUS SKELTON
PRIMARY EXAMINER